

IN THE CLAIMS

The status of the claims is provided below:

Claims 1-51: (Canceled).

52. (New) An antitumor composition comprising an immunostimulatory oligonucleotide comprising a nonmethylated octameric CG motif of the sequence AACGTTAT.

53. (New) The composition of Claim 52, wherein the immunostimulatory oligonucleotide is single-stranded or double-stranded.

54. (New) The composition of Claim 52, wherein the immunostimulatory oligonucleotide is stabilized.

55. (New) The composition of Claim 54, wherein the immunostimulatory oligonucleotide is stabilized by a modified backbone selected from the group consisting of a phosphorothioate, a phosphorodithioate, a phosphodiester-phosphorothioate mixture, a methylphosphonate, and a stabilization at a 3' or 5' end.

56. (New) The composition of Claim 52, wherein the immunostimulatory oligonucleotide is combined with an encapsulating agent, colloidal dispersion system, or a polymer.

57. (New) The composition of Claim 52, wherein at least one cytosine of the nonmethylated octameric CG motif(s) of the sequence AACGTTAT is replaced with 5-bromocytosine.

58. (New) The composition of Claim 52, wherein the immunostimulatory oligonucleotide is between 20 and 100 nucleotides in length.

59. (New) A method of treating cancer, comprising administering an effective amount of the composition of Claim 52 to a human.

60. (New) The method of Claim 59, wherein the cancer is a cancer of the nervous system.

61. (New) The method of Claim 59, wherein the cancer is astrocytoma, glioblastoma, medulloblastoma, neuroblastoma, melanoma or carcinoma.

62. (New) The method of Claim 59, wherein the human has a tumor.

63. (New) An oligonucleotide comprising a nonmethylated octameric CG motif of the sequence AACGTTAT.

64. (New) The oligonucleotide of Claim 63, which is between 20 and 100 nucleotides in length.

65. (New) The oligonucleotide of Claim 64, which is selected from the group consisting of the sequences of SEQ ID NO: 9, 10, 16, 21, 31, 33, 34, 35 and 37.

66. (New) The oligonucleotide of Claim 63, which is stabilized by a modified backbone selected from the group consisting of a phosphorothioate, a phosphorodithioate, a phosphodiester-phosphorothioate mixture, a methylphosphonate, and a stabilization at a 3' or 5' end.